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Substitute for form 1449/PTO		Complete if Known			
04552101010110111	1440.10	Application Number			
INFORM	ATION DISCLOSURE	Filing Date	April 1, 2004		
		First Named Inventor	Boyd J. Wathen		
STATEM	IENT BY APPLICANT	Art Unit			
(Use as many sheets as necessary)		Examiner Name			
Sheet 1	of 3	Attorney Docket Number	102-1-006		

•				DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2 (f known)</sup>			Figures Appear
41		<sup>US-</sup> 3,005,790	10-24-1961	Wynn et al.	
0		<sup>US-</sup> 4,735,658	04-05-1988	Blet et al.	
		us- 5,603,745	02-18-1997	Petersen et al.	
		<sup>US-</sup> 5,801,204	08-01-1998	Johansson et al.	
		<sup>US-</sup> 5,968,222	10-19-1999	Kodali	
		<sup>US-</sup> 4,001,033	01-04-1977	Anthone et al.	
		<sup>US-</sup> 4,107,112	08-15-1978	Latta Jr. et al.	
		<sup>US-</sup> 4,571,116	02-18-1986	Patil et al.	
		<sup>US-</sup> 5,595,782	01-21-1997	Cole	
		<sup>US-</sup> 4,663,067	05-05-1987	Mallow et al.	
		<sup>US-</sup> 6,065,903	05-23-2000	Doyle	
		<sup>US-</sup> 6,149,351	11-21-2000	Doyle	
		<sup>US-</sup> 5,235,070	08-10-1993	Green et al.	
		us. 5,192,337	03-09-1993	Wajer et al.	
		US- 4,827,871	05-09-1989	Morrison	
		<sup>US-</sup> 1,606,651	11-09-1926	MacReady	
		<sup>US-</sup> 2,167,393	07-25-1939	Muncy	
101		<sup>US-</sup> 2,302,996	11-24-1942	Lilligren	
1		<sup>US-</sup> 2,740,291	04-03-1956	Brown	

`		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Γ
	ļ	Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	77	Or Relevant Figures Appear	Т
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Examiner Signature	Date Considered	2/5/05

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	Solute 131 10111 14431 10	Application Number			
18	FORMATION DISCLOSURE	Filing Date	April 1, 2004		
		First Named Inventor	Boyd J. Wathen		
STATEMENT BY APPLICANT		Art Unit			
	(Use as many sheets as necessary)	Examiner Name	·		
Sheet	2 of 3	Attorney Docket Number	102-1-006		

			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
11		<sup>US-</sup> 2,842,965	07-15-1958	Thompson	
		<sup>US-</sup> 3,843,198	10-22-1974	Reynolds	
-{}		<sup>US-</sup> 3,988,243	10-26-1976	Huff	
		<sup>US-</sup> 4,332,301	06-01-1982	Jonell	
		<sup>US-</sup> 4,650,013	03-17-1987	Hoeft	.
	1	<sup>US-</sup> 5,103,683	04-14-1992	Lyons	
		<sup>US-</sup> 5,894,096	04-13-1999	Kotraba et al	
$\mathcal{L}$		<sup>US-</sup> 5,975,219	11-02-1999	Sprehe	
917		<sup>US-</sup> 6,386,026	05-14-2002	Zamfes	
$\alpha$		US-	1		
		US-			
	Í	US-			
		US-			

		FORE	IGN PATENT DOCU	IMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
	<u> </u>	Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> ( <i>if known</i> )	MM-DD-YYYY		Or Relevant Figures Appear	T°
		AU 200010013 A	8-2000	Clur		
		WO 99/51582 A1 (PCT)	10-1999	Bridges et al.	<del> -</del>	
-		WO 98/28517 A1 (PCT)	07-1998	Sprehe		

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	Art Unit			
(Use as many sheets as necessary)	Examiner Name			
Sheet 3 of 3	Attorney Docket Number	102-1-006		

Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Initials*	No. <sup>1</sup>	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		Derwent - Acc No. 1998-521701 - Abstract of ZA9711151A, Inventor Clur - "Apparatus for sampling drill- cuttings from drill hole in flow of a separate drill cuttings from air, directs same separated drill cuttings from air, directs same separated drill cuttings collection points, sampler operates automatically in response to depth of drill hole"	
		Derwent - ACC No. 2002-529438 - Abstract of AU200235593A _Inv. Clur "Automatic drill duttings sampling apparatus of cuttings entrained in flushing air flowing from drill hole for determination of rock structure and ore grade	
		http://www.weshingtonrotating.com/products.html, downloaded "The Divertech Pneumatic Diverter System" by Washington Rotating Control Heads, Inc. 4 pages, 5/22/2003	
		http://www.washingtonrotating.com/products.html, downloaded Washington Rotating Control Heads, Inc Product Index 1 page 5/22/2003	
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Examiner	Date	2/0/1
Signature	Considered	2/3/03

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